Amendment and Response to Notice dated March 5, 2010

Notice to Comply mailed on January 27, 2010

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AMENDMENTS TO THE CLAIMS:

The following list of claims will replace all prior versions, and listings, of claims. Please amend the claims as follows:

1.-16. (Cancelled).

17. (Currently amended) A method for treating shock comprising administering to a subject an effective amount of a peptide of Formula II

$$R_1$$
 N CH_2 C Z_1 Arg Z_3 Z_4 Z_5 (II)

wherein:

R₁ and R₂ being equal or different denote hydrogen, a saturated or unsaturated hydrocarbon comprising from 1 to 10 carbon atoms;

 Z_1 denotes a histidine residue;

Arg denotes an arginine residue;

 Z_3 denotes a proline or valine residue;

Z₄ denotes a leucine or valine residue; and

 Z_5 denotes a peptide derived from the Bbeta chain of the fibrin, which peptide has the biological property of matching the inducible VE-cadherin binding motif on the B β -chain (i.e., B β_{15-42}) of human fibrin comprising:

Asp-Lys-Arg-Glu-Glu-Ala-Pro-Ser-Leu-Arg-Pro-Ala-Pro-Pro-Pro-Ile-Ser-Gly-Gly-Gly-Tyr-Arg (SEQ ID NO: 8).

18. (Previously presented) The method according to claim 17, wherein the saturated or unsaturated hydrocarbon in the meaning of R_1 and R_2 comprises 1 to 3 carbon atoms.

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19. (Currently amended) The method according to claim 17, wherein: [[;]]

Z₃ denotes a proline residue; and

Z₄ denotes a leucine residue.

20. (Previously presented) The method according to claim 18, wherein:

Z₃ denotes a proline residue; and

Z₄ denotes a leucine residue.

21. (Previously presented) A method for treating shock comprising administering to a subject an effective amount of a peptide having the N-terminal sequence:

Gly-His-Arg-Pro-Leu-Asp-Lys-Lys-Arg-Glu-Glu-Ala-Pro-Ser-Leu-Arg-Pro-Ala-Pro-Pro-Ile-Ser-Gly-Gly-Gly-Tyr-Arg (SEQ ID NO: 3);

which peptide has the biological property of matching the inducible VE-cadherin binding motif on the B β -chain (i.e., B β_{15-42}) of human fibrin.

- 22. (Previously presented) The method according to claim 21, wherein the peptide is of formula: Gly-His-Arg-Pro-Leu-Asp-Lys-Lys-Arg-Glu-Glu-Ala-Pro-Ser-Leu-Arg-Pro-Ala-Pro-Pro-Ile-Ser-Gly-Gly-Gly-Tyr-Arg (SEQ ID NO: 3).
- 23. (Previously presented) The method of claim 17, wherein the shock is associated with one or more from the group comprising bacterial toxins, disseminated intravascular coagulopathy, necrotizing fasciitis, hemorrhagic shock following viral infection, in particular caused by filovirus, arenaviridae, bunyaviridae, flavivirus, dengue, acute hemorrhagic respiratory failure caused by infectious agents or autoimmune diseases, organ failure after organ injury, in particular through myocardial infarction, vascular surgery, clamping of organs, hemorrhagic shock, lung infarction, liver infarction, gut infarction, surgical procedures and stroke, and organ dysfunction of grafted organs.

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- 24. (Previously presented) The method of claim 18, wherein the shock is associated with one or more from the group comprising bacterial toxins, disseminated intravascular coagulopathy, necrotizing fasciitis, hemorrhagic shock following viral infection, in particular caused by filovirus, arenaviridae, bunyaviridae, flavivirus, dengue, acute hemorrhagic respiratory failure caused by infectious agents or autoimmune diseases, organ failure after organ injury, in particular through myocardial infarction, vascular surgery, clamping of organs, hemorrhagic shock, lung infarction, liver infarction, gut infarction, surgical procedures and stroke, and organ dysfunction of grafted organs.
- 25. (Previously presented) The method of claim 19, wherein the shock is associated with one or more from the group comprising bacterial toxins, disseminated intravascular coagulopathy, necrotizing fasciitis, hemorrhagic shock following viral infection, in particular caused by filovirus, arenaviridae, bunyaviridae, flavivirus, dengue, acute hemorrhagic respiratory failure caused by infectious agents or autoimmune diseases, organ failure after organ injury, in particular through myocardial infarction, vascular surgery, clamping of organs, hemorrhagic shock, lung infarction, liver infarction, gut infarction, surgical procedures and stroke, and organ dysfunction of grafted organs.
- 26. (Previously presented) The method of claim 20, wherein the shock is associated with one or more from the group comprising bacterial toxins, disseminated intravascular coagulopathy, necrotizing fasciitis, hemorrhagic shock following viral infection, in particular caused by filovirus, arenaviridae, bunyaviridae, flavivirus, dengue, acute hemorrhagic respiratory failure caused by infectious agents or autoimmune diseases, organ failure after organ injury, in particular through myocardial infarction, vascular surgery, clamping of organs, hemorrhagic shock, lung infarction, liver infarction, gut infarction, surgical procedures and stroke, and organ dysfunction of grafted organs.

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27. (Previously presented) The method of claim 21, wherein the shock is associated with one or more from the group comprising bacterial toxins, disseminated intravascular coagulopathy, necrotizing fasciitis, hemorrhagic shock following viral infection, in particular caused by filovirus, arenaviridae, bunyaviridae, flavivirus, dengue, acute hemorrhagic respiratory failure caused by infectious agents or autoimmune diseases, organ failure after organ injury, in particular through myocardial infarction, vascular surgery, clamping of organs, hemorrhagic shock, lung infarction, liver infarction, gut infarction, surgical procedures and stroke, and organ dysfunction of grafted organs.

28. (Previously presented) The method of claim 22, wherein the shock is associated with one or more from the group comprising bacterial toxins, disseminated intravascular coagulopathy, necrotizing fasciitis, hemorrhagic shock following viral infection, in particular caused by filovirus, arenaviridae, bunyaviridae, flavivirus, dengue, acute hemorrhagic respiratory failure caused by infectious agents or autoimmune diseases, organ failure after organ injury, in particular through myocardial infarction, vascular surgery, clamping of organs, hemorrhagic shock, lung infarction, liver infarction, gut infarction, surgical procedures and stroke, and organ dysfunction of grafted organs.